

REMARKS

Claims 1 – 6 are pending and under consideration in the above-identified application.

In the Office Action, Claims 1 – 6 were rejected.

In this Amendment, Claims 1, and 4 – 6 are amended, and Claim 3 is cancelled. No new matter has been introduced as a result of this amendment.

Accordingly, Claims 1, 2 and 4 – 6 are now at issue.

I. Objection to the Drawings

In response to the Examiner objecting to Figures 14B, 15B, 17B, and 18B, Applicants have appropriately added the legend “Prior Art” to these figures.

Accordingly, Applicants respectfully request withdrawal of this objection.

II. Objection to the Specification

As requested by the Examiner, Applicants have appropriately amended the title.

Accordingly, Applicants respectfully request withdrawal of this objection.

III. 35 U.S.C. § 112 Rejection of Claims

Claims 1 – 6 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention.

Claims 1 and 6 have been amended by substituting the wording “the” with the wording “a” so as to remove any corresponding antecedent basis rejections.

Moreover, in regard to Claim 6 the Specification discloses that:

“The isolated boundary width for isolation, namely the size of gap between neighboring polygonal pillar-shaped bodies is set to about 1 μ m which is almost equal to the minimum resolution of the photolithography process.”

See page 12, lines 14 – 18. Thus, Claim 6 is definite in view of this disclosure.

Accordingly, Applicants respectfully request that these 35 U.S.C. § 112 rejection of claims be withdrawn.

IV. 35 U.S.C. § 102 Rejection of Claims

Claims 1 – 6 were rejected under 35 U.S.C. § 102(e) as being anticipated by Tsuda et al. (“Tsuda”) (U.S. Patent No. 5,936,688).

Claim 1 is directed to a method of manufacturing a diffusing reflector, which comprises the processes of preparing a substrate, forming a first resin film having photosensitivity on the substrate, providing gathering of pillar-shaped bodies isolated from each other through patterning of the resin film with photolithography, deforming gently the pillar-shaped bodies through a reflow, forming an uneven surface layer having the maximum inclination angle of under 12° by coating the gently deformed pillar-shaped bodies and covering open flat spaces located between the isolated pillar-shaped bodies with a second resin thereby minimizing an occurrence of a flat surface area on the substrate, and forming a metal film on the uneven surface layer.

Thus, Claim 1 recites that an uneven surface layer is formed by coating the gently deformed pillar-shaped bodies and covering open flat spaces located between the isolated pillar-shaped bodies with a second resin thereby minimizing an occurrence of a flat surface area on the substrate. That is, flat surface areas are eliminated from the uneven surface layer formed on the substrate, thereby removing any potential generation of a mirror-surface reflection.

In contrast, Tsuda discloses that:

“After the following heat treatment process at about 200 to 240 °C, the protrusions 32b on the substrate 31 are rounded off, thereby obtaining convex portions 32c, as shown in FIG. 5D, having a smooth surface without any sharp edges thereon. In the present example, the heat treatment is performed at about 220 °C for about 30 minutes.

Then, as shown in FIG. 5E, a positive type photosensitive resin is spin-coated over the substrate 31 including the convex portions 32c at, preferably, about 500 to 3000 rpm so as to form a photosensitive resin layer 34a to be of a desired thickness. In the present example, “MFR” (manufactured by JAPAN SYNTHETIC RUBBER CO., LTD.) is employed as the positive type photosensitive resin applied onto the substrate for about 30 seconds while spinning the glass substrate 31 at about 2000 rpm, thereby forming a photosensitive resin layer 34a to be about 0.5 µm-thick on the glass substrate 31.”

See column 10, lines 8 – 34, and Figures 1E, 5E. Thus, Tsuda discloses that the photosensitive resin is spin-coated on the substrate including the convex portions 32c to produce the resin layer 34a. As it is known in the art, Spin coating is a process used to apply uniform thin films to flat

substrates. That is, a spin-coating process produces layers with uniformly flat surfaces on a flat areas of a body to be spin-coated except on areas of the body that end up protruding out the produced coating layer. Applicants have included three documents disclosing ordinary skills in the art of spin-coating. As such, areas of the resin layer 34a located between the protrusions 32b have uniform flat surfaces due to the spin-coating process.

Hence, Tsuda fails to teach or suggest forming an uneven surface layer by coating the gently deformed pillar-shaped bodies and covering open flat spaces located between the isolated pillar-shaped bodies with a second resin and minimizing an occurrence of a flat surface area on the substrate.

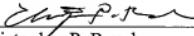
Accordingly, Claim 1 is patentable over Tsuda, as are dependent Claims 2 and 4 – 6. Applicants respectfully request withdrawal of these rejections.

V. Conclusion

In view of the above amendments and remarks, Applicants submit that Claims 1, 2 and 4 – 6 are clearly allowable over the cited prior art, and respectfully request early and favorable notification to that effect.

Respectfully submitted,

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